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ARMY ENERGY

WINNING IDEAS

Here are some winning ideas from the Army Energy Program . . . ideas that work . . . ideas worth sharing.

The installations highlighted here significantly reduced their energy consumption without compromising combat readiness. Innovation and imagination helped them win energy conservation awards.

You too can make your community a winner . . . by saving Army energy.

Heat with infrared

Goeppingen Military Community installed infrared heating in its large aircraft hangers and vehicle maintenance shops. The community showed a 30.4-percent energy savings in one year.

Mark fuel costs on cars

Badger Army Ammunition Plant marks each vehicle with stickers that indicate its mpg and approximate annual fuel costs. The stickers also remind drivers to consolidate trips and eliminate unnecessary vehicle use.

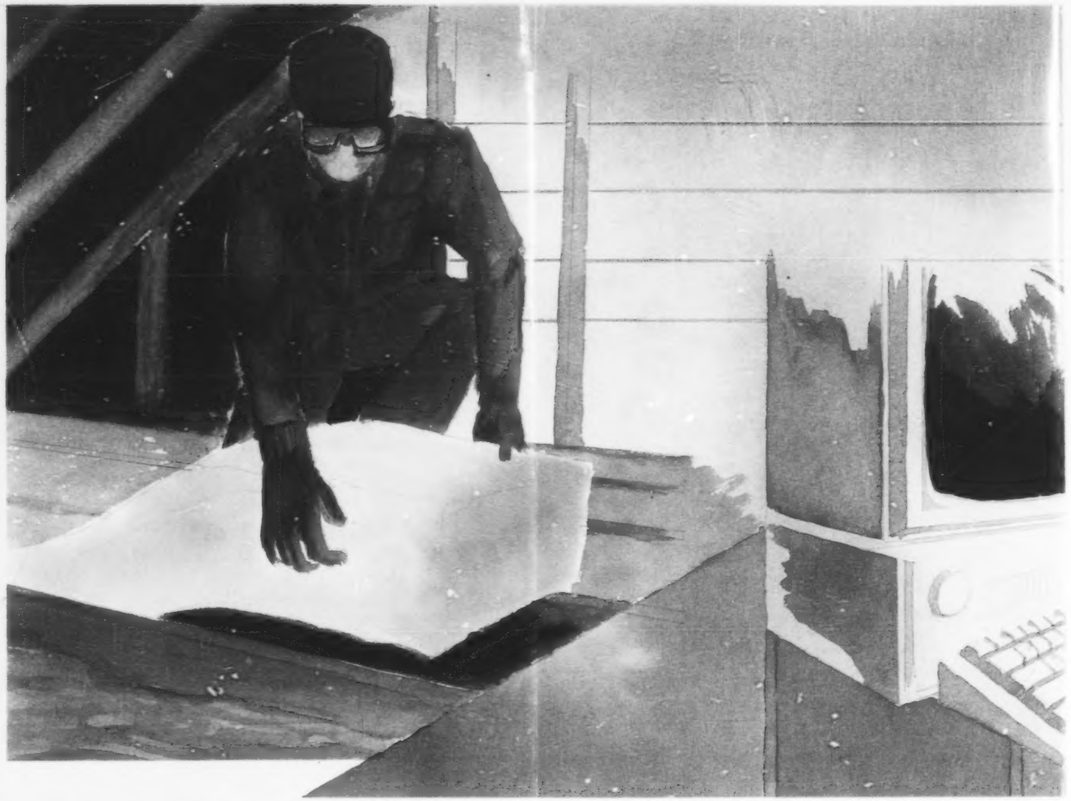
Serve up a food service action plan

The Fort Huachuca dining facilities take a bite out of energy waste. The Army Food Service Energy Management Program makes it possible. Supported by commanders, food service officers, and food service personnel, this plan saves energy at a rate of 15 percent.

Fort Huachuca has a six-step action plan:

- Introduce the program.
- Conduct an equipment maintenance audit.
- Track equipment use.
- Conduct a kick-off meeting.
- Establish an energy schedule.
- Track and follow the program.

Restaurant owners using this plan have averaged a 25-percent energy savings without making capital expenditures.



He saw the light

The energy coordinator at Fort Devens got tired of his Commander's heckling about outside lights that were left on during the day. The solution was simple. He got his DOL folks to help. They locally purchased outdoor photo sensor switches and passed them along to the building energy monitors to install. It got the lights out and the boss off his back.

Employ energy-smart engineering

The Nuernberg Military Community combines innovative solutions with standard energy-saving measures such as thermopane windows and insulated attics and pipes. A new $15 million commissary has a 100-percent heat recovery system added to its refrigeration compressors.

Establish energy teams

Rival energy teams at Lake City Army Ammunition Plant compete with each other to reach their energy goals first. During monthly meetings the commander tracks the progress of each team.

Apply energy-saving software

Fort McCoy and the Construction Engineering Research Laboratory (CERL) teamed up to develop energy-saving software. The result . . . a utilities management system that compiles energy consumption data currently calculated by hand. This automated system gives people more time to analyze data, make on-site inspections, and find ways to save energy.

Conduct energy contests

Company-sized units at Fort Lewis compete in monthly energy contests. The units report on energy conservation and incorporate good energy habits into their daily routines. Unit activities include repair and utilities, recycling, energy inspections, and energy training. Building monitors also help. The winning unit receives $300 from funds collected by recycling.

Light up the natural way

Sacramento Army Depot installed photoelectric switching equipment to control lighting in areas receiving enough daylight. Using natural light not only reduces electric light use, but also decreases cooling loads, saves electricity, and reduces material and labor costs of replacing lights.

Simulate training

Fort Knox knows simulators are an outstanding way to save mobility fuel. It has facilities for:

- M-1 and M-3 Conduct of Fire Trainers (COFT).
- Simnet T and Simnet D.
- A tank driver training simulator (programmed for FY 90).

Flag work orders

Schweinfurt Military Community now flags energy-related work orders, thanks to Ronald V. Klutz. These orders are assigned priority 2, cutting execution time to about a week. Such orders used to take 90 days to finish.

A new printout from the Integrated Facilities System (IFS) helps Schweinfurt track the work orders.

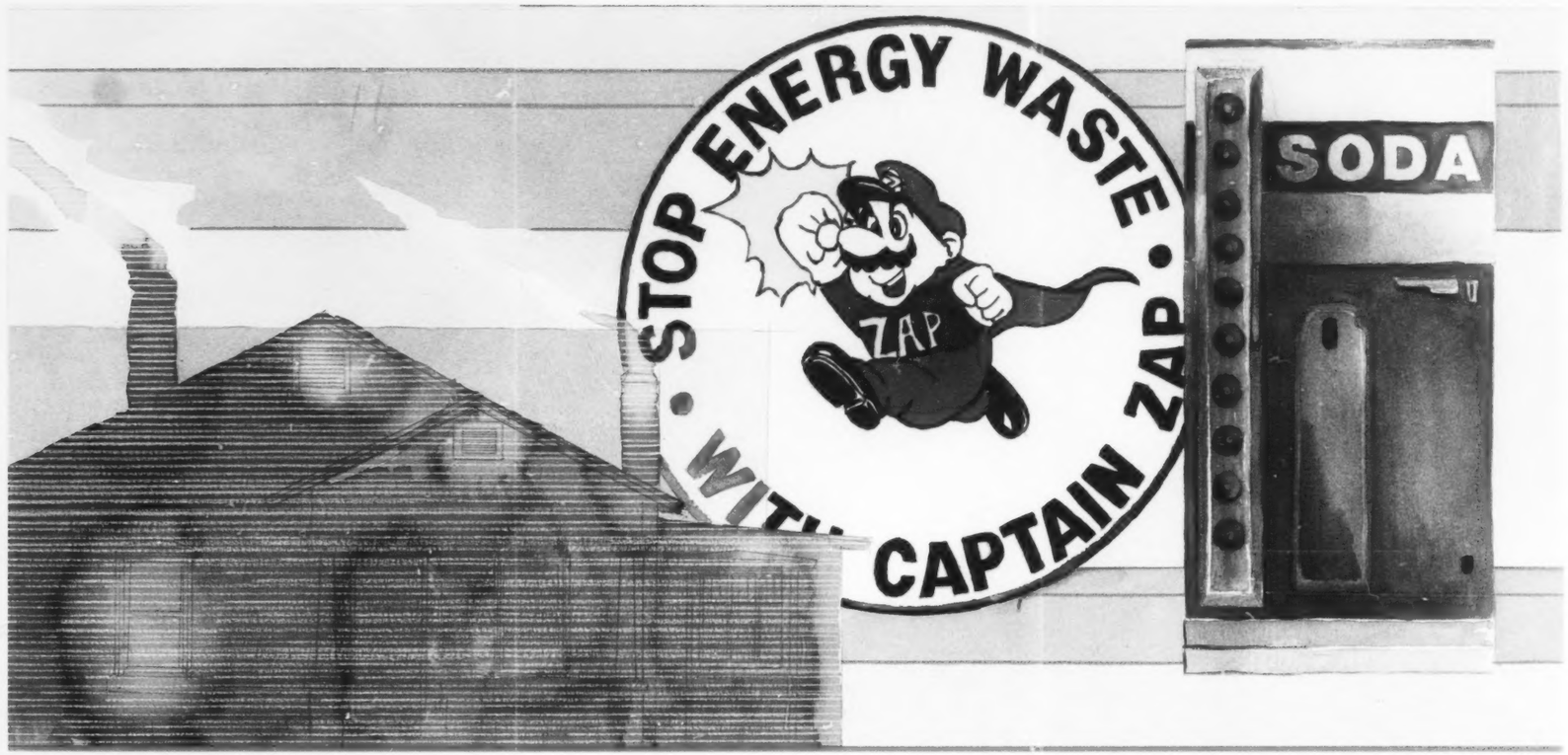
Key into kids

Fort Bliss finds that children are the key to energy conservation in the home. School-aged children receive promotional "give-aways." Key rings, pens, pencils, stickers, and baseball caps all encourage energy awareness.

Lights on, nobody home

Having problems with people leaving on lights in common areas such as day rooms, conference rooms, or latrines? Try installing motion detection sensor switches for a sure-fire fix. The lights stay on when people are in the room but turn off when the room empties and the switch detects no motion.

This can be a real money saver in large headquarters and administrative buildings where assigning responsibility for common areas can be a problem.



Try thermal imaging

The Indiana Army Ammunition Plant bought a thermal imaging system that pinpoints building energy losses, steam distribution system energy losses, and electrical problems. The plant also developed an infrared inspection and survey plan which continuously collects and uses data.

Shorten cooling time

White Sands Missile Range shortened the running time of evaporative coolers by two to three hours daily. Except for 30 minutes to freshen the air at the start of each workday, the coolers only operate from 10:00 to close of business.

Waste busters

Fort Lewis uses the sneak attack to bust its energy waste. Energy technicians make unannounced visits after duty hours to find energy waste not noticed during the hustle and bustle of the day. These visits help pinpoint systems in need of repair, or those which can be shut down when not in use. Also, they help show how simple changes in daily work habits keep a lid on energy waste.

Create a superhero

Some installations call on a superhero to help conserve energy. In the Berlin Military Community, "Captain ZAP" appears on stickers, posters, and TV spots to give lighthearted tips on energy savings. Captain ZAP now appears throughout USAREUR . . . with great success.

Dim those vending machines

Fluorescent tubes that burned 24-hours a day in Louisiana Army Ammunition Plant vending machines burn no more. The machines are located in areas already well lit. By removing 52 tubes from 41 machines, the plant saves an estimated $1,388 per year.

Take a holiday

The Sierra Army Depot has a formal "Depot Holiday Closure Policy." Shutting down the depot to minimal operational levels saves energy during holidays. The policy encourages liberal leave at times when many workers are absent and productivity is low.

ARMY ENERGY AWARDS

ACTIVE ARMY

US Army Armor Center and Fort Knox
Fort Knox, Kentucky

HQ, I Corps and Fort Lewis
Fort Lewis, Washington

Nuernberg Military Community
US Army, Europe

ARMY NATIONAL GUARD

Montana Army National Guard

Virginia Army National Guard

ARMY RESERVE

Second United States Army
Fort Gillem, Georgia

FEDERAL ENERGY AWARDS

ORGANIZATIONAL AWARDS

Schweinfurt Military Community
US Army, Europe

Goeppingen Military Community
US Army, Europe

Fort McCoy, Wisconsin

HQ, I Corps and Fort Lewis
Fort Lewis, Washington

Lake City Army Ammunition Plant
Independence, Missouri

INDIVIDUAL AWARDS

Martin G. Elliott
Sierra Army Depot
Herlong, California

LTC Louis J. Martinez
Nuernberg Military Community
US Army, Europe

MAJ Dominic Izzo
Fulda Military Community
US Army, Europe

Louis A. Rouselle
HQ, 21st Support Command
US Army, Europe

SPECIAL AWARD

HQ, US Army, Europe and Seventh Army

Retrofit facilities

Fort McCoy uses short-term facilities retrofits. Installation workers:

- Replaced defective radiator control valves, thermostats, and zone valves.
- Installed automatic temperature setback systems in BOQs and administrative buildings.
- Used plastic around windows, doors, and walls of heated garages, shops, and administrative offices.
- Conducted pre-winter inspections of weather stripping around doors and windows.
- Used wood pellets to fire 165 buildings. Some buildings mix wood pellets and coal to improve heating efficiency.

Remind shoppers

Placards on carts in the commissary at Fort Lewis remind shoppers to "Save Army Energy."